

CLAIMS

1 1. A power delivery system, comprising:
2 a power converter; and
3 a land grid array socket mounted to an array of contacts on a surface of the power
4 converter corresponding to an array of contacts on the land grid array socket.

1 2. The power delivery system of Claim 1 wherein the array of contacts on the power
2 converter and the array of contacts on the land grid array socket are contact pads
3 fabricated from electrically conductive material.

1 3. The power delivery system of Claim 1 wherein the land grid array socket is
2 electrically coupled to a printed circuit board and includes an integrated circuit device
3 mounted to a land grid array package.

1 4. The power delivery system of Claim 1 wherein the power converter converts
2 voltage received from a power supply to a lower voltage and transmits the lower voltage
3 to the land grid array socket.

1 5. The power delivery system of Claim 1 wherein the land grid array socket is
2 mounted to the power converter and to a printed circuit board using a single direction of
3 assembly and compression contact technology.

1 6. A power delivery system, comprising:
2 a power converter;

3 a printed circuit board; and

4 a land grid array socket mounted to an array of contacts on a surface of the power
5 converter and on a surface of the printed circuit board using a single direction of
6 assembly.

1 7. The power delivery system of Claim 6 wherein the array of contacts on the power
2 converter and on the printed circuit board correspond to an array of contacts on the land
3 grid array socket, the array of contacts fabricated from electrically conductive material.

1 8. The power delivery system of Claim 6 wherein the land grid array socket includes
2 an integrated circuit device mounted to a land grid array package.

1 9. The power delivery system of Claim 6 wherein the power converter converts
2 voltage received from a power supply to a lower voltage and transmits the lower voltage
3 to the land grid array socket.

1 10. The power delivery system of Claim 6 wherein the land grid array socket is
2 mounted to the power converter and to the printed circuit board using compression
3 contact technology.

1 11. A method of mounting a land grid array socket to a power converter, the method
2 comprising:

3 providing an array of contacts on a surface of the power converter;

4 providing an array of contacts on a land grid array socket interface corresponding
5 to the array of contacts on the power converter;

6 mounting the land grid array socket to the power converter by vertically
7 compressing the array of contacts on the land grid array socket interface with the array of
8 contacts on the surface of the power converter.

9 12. The method of Claim 11 wherein the step of mounting the land grid array socket
10 to the power converter provides an electrical connection between the land grid array
11 socket and the power converter.

12 13. The method of Claim 11 wherein the land grid array socket includes an integrated
13 circuit device mounted to a land grid array package.

14 14. The method of Claim 11 wherein the step of mounting the land grid array socket
15 to the power converter further comprises the step of mounting the land grid array socket
16 to a printed circuit board by vertically compressing an array of contacts on the land grid
17 array socket with an array of corresponding contacts on the printed circuit board.

18 15. The method of Claim 14 wherein the step of mounting the land grid array socket
19 to the printed circuit board provides an electrical connection between the land grid array
20 socket and the printed circuit board.

21 16. The method of Claim 11 wherein the step of mounting the land grid array socket
22 to the printed circuit board further comprises the step of mounting the land grid array
23 socket to a retention mechanism, the array of contacts on the land grid array socket

4 mounted to the array of contacts on the printed circuit board through a relief in the
5 retention mechanism.

1 17. The method of Claim 11 wherein the land grid array socket serves as a retention
2 mechanism to hold the land grid array socket in proper alignment with the printed circuit
3 board and in proper alignment with the power converter.

1 18. The method of Claim 11 wherein the power converter converts voltage received
2 from a power supply to a lower voltage and transmits the lower voltage to the land grid
3 array socket